

Ten-Year Airport Capital Improvement Program (ACIP) 2014-2023



Grosse Ile Municipal Airport

Grosse Ile , MI

December 2013

Michigan State Block Grant Program

Submitted by:

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Prepared by:

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<div>C&S COMPANIES®</div>		MICHIGAN STATE BLOCK GRANT PROGRAM										
		TEN-YEAR AIRPORT CAPITAL IMPROVEMENT PROGRAM (CIP) FY-2014* to FY-2023										
*ACIP includes current development year (2013 already programmed - minor changes acceptable)												
Airport Name:		GROSSE ILE MUNICIPAL AIRPORT									Date Prepared:	12/4/2013
Associated City:		GROSSE ILE, MI									Prepared By:	C&S ENGINEERS, INC.
Sponsor:		TOWNSHIP OF GROSSE ILE									Sponsor email address & phone:	mduker@grosseileairport.com 734-675-0155
Airport Identifier:		ONZ									FINAL ACIP due to MDOT AERO: no later than 12/6/2013	
Development Year	Project Description	Shown on ALP? (Yes or No)	ACIP Code**	NPIAS Priority Rating**	Federal Entitlements	Federal Apportionment	Federal Discretionary	State	Local	Total	Remarks/Item Justification - Provide as much detail as possible	
2014	Exhibit A and ALP Update	NA	PL PL MA	66	\$38,000	\$0	\$0	\$1,000	\$1,000	\$40,000	Update needed for Exhibit A Property Map. Existing property map is outdated. Airport needs an accurate map of property areas and land uses. Land releases are still not approved by the FAA. The ALP property map will also need to be updated to match.	
2014	Pavement Repairs	Yes	RE RW IM	70	\$0	\$0	\$0	\$67,500	\$7,500	\$75,000	The runway and taxiway pavements continue to deteriorate. The PCI ratings do not accurately reflect the pavement failures that are occurring. Pavement repairs will likely be required until reconstruction can take place.	
2014	Easement Acquisition	Yes	ST LA SZ	44	\$67,500	\$0	\$0	\$3,750	\$3,750	\$75,000	Easement acquisition to allow for tree clearing and the removal of the displaced threshold on Runway 4-22.	
2015	Runway 4-22 Reconstruction - Design	Yes	RE RW IM	70	\$315,000	\$0	\$0	\$17,500	\$17,500	\$350,000	Runway 4-22 is now starting to deteriorate in the same way as Runway 17-35. It is believed that the same underlying issues and material issues exist in Runway 4-22 as in 17-35. The PCI of 97 does not accurately reflect the pavement failures that are occurring. Assumed asphalt reconstruction for the construction estimate.	
2015	Taxiway A East Reconstruction - Design	Yes	RE TW IM	66	\$86,400	\$0	\$0	\$4,800	\$4,800	\$96,000	Taxiway A pavement continues to deteriorate in the same way as Runway 17-35. The PCI of 73 does not accurately reflect the pavement failures that are occurring.	
2015	Pavement Repairs	Yes	RE RW IM	70	\$0	\$0	\$0	\$67,500	\$7,500	\$75,000	The runway and taxiway pavements continue to deteriorate. The PCI ratings do not accurately reflect the pavement failures that are occurring. Pavement repairs will likely be required until reconstruction can take place.	
2016	Runway 4-22 Reconstruction - Construction	Yes	RE RW IM	70	\$312,350	\$0	\$3,547,120	\$214,415	\$214,415	\$4,288,300	Runway 4-22 is now starting to deteriorate in the same way as Runway 17-35. It is believed that the same underlying issues and material issues exist in Runway 4-22 as in 17-35. The PCI of 97 does not accurately reflect the pavement failures that are occurring. Assumed asphalt reconstruction for the construction estimate.	
2016	Taxiway A East Reconstruction - Construction	Yes	RE TW IM	66	\$0	\$0	\$1,071,261	\$59,515	\$59,515	\$1,190,290	Taxiway A pavement continues to deteriorate in the same way as Runway 17-35. The PCI of 73 does not accurately reflect the pavement failures that are occurring.	
2017	Carryover	NA	NA	NA	\$0	\$0	\$0	\$0	\$0	\$0	Carryover funding for future projects.	
2018	General Aviation Apron Rehabilitation and Drainage - Design	Yes	RE AP IM	60	\$45,000	\$0	\$0	\$2,500	\$2,500	\$50,000	Pavement failure due to poor drainage. PCI ranges from 68-76 as of 2011.	
2018	Pavement Repairs	Yes	RE RW IM	70	\$0	\$0	\$0	\$54,000	\$6,000	\$60,000	The runway and taxiway pavements continue to deteriorate. The PCI ratings do not accurately reflect the pavement failures that are occurring. Pavement repairs will likely be required until reconstruction can take place.	
2018	General Aviation Apron Rehabilitation and Drainage, and Hold Bay - Construction	Yes	RE AP IM	60	\$255,000	\$510,000	\$0	\$42,500	\$42,500	\$850,000	Pavement failure due to poor drainage. PCI ranges from 68-76 as of 2011. Holding bay needed to facilitate aircraft movement on Taxiway C.	
2019	Runway 17-35 Reconstruction - Design	Yes	RE RW IM	70	\$150,000	\$93,000	\$0	\$13,500	\$13,500	\$270,000	Runway 17-35 pavement continues to deteriorate. The PCI of 78 does not accurately reflect the pavement failures that are occurring. Assumed 3,800' length and asphalt reconstruction for the construction estimate. The ALP currently does not reflect a length of 3,800'.	
2019	Taxiway A West Reconstruction - Design	Yes	RE TW IM	66	\$0	\$61,200	\$0	\$3,400	\$3,400	\$68,000	Taxiway A pavement continues to deteriorate in the same way as Runway 17-35. The PCI of 73 does not accurately reflect the pavement failures that are occurring.	

2019	Hangar Roof Repair	NA	ST BD MS	32	\$0	\$0	\$0	\$0	\$43,000	\$43,000	Existing hangar roofs are failing and in need of repair. This will be funded 100% locally.
2020	Runway 17-35 Reconstruction - Construction	Yes	RE RW IM	70	\$0	\$3,009,960	\$0	\$167,220	\$167,220	\$3,344,400	Runway 17-35 pavement continues to deteriorate. The PCI of 78 does not accurately reflect the pavement failures that are occurring. Assumed 3,800' length and asphalt reconstruction for the construction estimate. The ALP currently does not reflect a length of 3,800'.
2020	Taxiway A West Reconstruction - Construction	Yes	RE TW IM	66	\$0	\$757,458	\$0	\$42,081	\$42,081	\$841,620	Taxiway A pavement continues to deteriorate in the same way as Runway 17-35. The PCI of 73 does not accurately reflect the pavement failures that are occurring.
2021	LED MIRL, Other Lighting Improvements, AWOS Replacement	Yes	RE RW LI	70	\$150,000	\$109,200	\$0	\$14,400	\$14,400	\$288,000	Upgrade to more energy efficient LED lighting to improve energy costs, increase up-time, and decrease maintenance.
2022	Extend Airport Fence and Repair Gates - Phase II	Yes	ST EQ SE	41	\$106,200	\$0	\$0	\$5,900	\$5,900	\$118,000	Fencing needed for wildlife and security.
2023	SRE - Used Plow Truck	NA	ST EQ SN	47	\$62,550	\$0	\$0	\$3,475	\$3,475	\$69,500	Existing equipment not adequate for snow removal.
2023	SRE Building Site Work	Yes	ST BD SN	39	\$70,200	\$0	\$0	\$3,900	\$3,900	\$78,000	Parking pad and access road for SRE Building.

** In accordance with FAA Order 5100.39A, Appendix 6 - Fields need to be completed

CONCEPT (PROJECT) NARRATIVE AND JUSTIFICATION SHEET FOR AIRPORT CAPITAL IMPROVEMENT PROGRAM (ACIP)

Airport and Associated City Grosse Ile Municipal Airport Grosse Ile, MI		Concept(s) Development Year 2014	
Concept(s) Description Exhibit A and ALP Update			
Concept(s) Narrative/Justification (see guidance on preparing your project's justification) Update needed for Exhibit A Property Map. Existing property map is outdated. Airport needs an accurate map of property areas and land uses. Land releases are still not approved by the FAA. The ALP property map will also need to be updated to match. Using 2011 funding at 95% match.			
PCI Information for pavement rehabilitation (Please provide PCI rating(s) and year surveyed for proposed project)			
Section	Date of PCI Survey	PCI Rating	
Section	Date of PCI Survey	PCI Rating	
Section	Date of PCI Survey	PCI Rating	
ALP Verification (Please provide date of approved ALP and applicable sheet number(s) where proposed project is located)			
Verify Project is on ALP <input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A		Date of Original FAA Approved ALP	Sheet Number(s)
Date(s) of Approved Update(s)			
Comments			

ALP Note: If not on Airport Layout Plan (ALP), project cannot be programmed until the proposed development, if applicable is on an approved ALP.

CONCEPT (PROJECT) NARRATIVE AND JUSTIFICATION SHEET FOR AIRPORT CAPITAL IMPROVEMENT PROGRAM (ACIP)

Airport and Associated City Grosse Ile Municipal Airport Grosse Ile, MI		Concept(s) Development Year 2014	
Concept(s) Description Pavement Repairs			
Concept(s) Narrative/Justification (see guidance on preparing your project's justification) The runway and taxiway pavements continue to deteriorate. The PCI ratings do not accurately reflect the pavement failures that are occurring. Pavement repairs will likely be required until reconstruction can take place.			
PCI Information for pavement rehabilitation (Please provide PCI rating(s) and year surveyed for proposed project)			
Section TWAGI-10	Date of PCI Survey 2011	PCI Rating 73	
Section RW422GI-10	Date of PCI Survey 2011	PCI Rating 97	
Section RW1735GI-10 and -20	Date of PCI Survey 2011	PCI Rating 78 and 74	
ALP Verification (Please provide date of approved ALP and applicable sheet number(s) where proposed project is located)			
Verify Project is on ALP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		Date of Original FAA Approved ALP 3-21-1997	Sheet Number(s)
Date(s) of Approved Update(s)			
Comments			

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CONCEPT (PROJECT) NARRATIVE AND JUSTIFICATION SHEET FOR AIRPORT CAPITAL IMPROVEMENT PROGRAM (ACIP)

Airport and Associated City Grosse Ile Municipal Airport Grosse Ile, MI		Concept(s) Development Year 2014	
Concept(s) Description Easement Acquisition			
Concept(s) Narrative/Justification (see guidance on preparing your project's justification) Easement acquisition to allow for tree clearing and the removal of the displaced threshold on Runway 4-22.			
PCI Information for pavement rehabilitation (Please provide PCI rating(s) and year surveyed for proposed project)			
Section	Date of PCI Survey	PCI Rating	
Section	Date of PCI Survey	PCI Rating	
Section	Date of PCI Survey	PCI Rating	
ALP Verification (Please provide date of approved ALP and applicable sheet number(s) where proposed project is located)			
Verify Project is on ALP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		Date of Original FAA Approved ALP 3-21-1997	Sheet Number(s)
Date(s) of Approved Update(s)			
Comments			

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CONCEPT (PROJECT) NARRATIVE AND JUSTIFICATION SHEET FOR AIRPORT CAPITAL IMPROVEMENT PROGRAM (ACIP)

Airport and Associated City Grosse Ile Municipal Airport Grosse Ile, MI		Concept(s) Development Year 2015	
Concept(s) Description Runway 4-22 Reconstruction - Design			
Concept(s) Narrative/Justification (see guidance on preparing your project's justification) Runway 4-22 is now starting to deteriorate in the same way as Runway 17-35. It is believed that the same underlying issues and material issues exist in Runway 4-22 as in Runway 17-35. The PCI of 97 does not accurately reflect the pavement failures that are occurring. Assumed asphalt reconstruction for the construction cost estimate.			
PCI Information for pavement rehabilitation (Please provide PCI rating(s) and year surveyed for proposed project)			
Section RW422GI-10	Date of PCI Survey 2011	PCI Rating 97	
Section	Date of PCI Survey	PCI Rating	
Section	Date of PCI Survey	PCI Rating	
ALP Verification (Please provide date of approved ALP and applicable sheet number(s) where proposed project is located)			
Verify Project is on ALP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		Date of Original FAA Approved ALP 3-21-1997	Sheet Number(s) 4
Date(s) of Approved Update(s)			
Comments			

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PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
RUNWAY 4-22: FULL DEPTH RECONSTRUCTION WITH ASPHALT
BASED ON FY 2013 DOLLARS

E39.MKT.CRM

12/05/13

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000410	SAFETY AND SECURITY	1	LS	\$25,000.00	\$25,000.00
2	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$135,000.00	\$135,000.00
3	1000535	PERMITS	1	LS	\$5,000.00	\$5,000.00
4	1257051	MISC. ELECTRICAL	1	LS	\$180,000.00	\$180,000.00
5	1520410	UNCLASSIFIED EXCAVATION	21,000	Cyd	\$7.00	\$147,000.00
6	1520470	REMOVAL AND DISPOSAL OF BITUMINOUS PAVEMENT	37,500	Syd	\$4.00	\$150,000.00
7	1520472	REMOVAL AND DISPOSAL OF CONCRETE PAVEMENT	89,300	Syd	\$8.00	\$714,400.00
8	1540511	SUBBASE COURSE, TYPE 2 (SAND), COMPACTED MEASURE	16,500	Cyd	\$15.00	\$247,500.00
9	1547021	MISC. MDOT 6AA AGGREGATE DRAINAGE COURSE	7,100	Cyd	\$35.00	\$248,500.00
10	2080610	SOIL EROSION AND SEDIMENTATION CONTROL	1	LS	\$18,000.00	\$18,000.00
11	2090520	CRUSHED AGGREGATE BASE COURSE, MATERIAL AS SPECIFIED, COMPACTED IN PLACE	5,100	Cyd	\$35.00	\$178,500.00
12	4110620	BITUMINOUS AGGREGATE SURFACE COURSE, 20AAX COMPOSITION	9,300	Ton	\$90.00	\$837,000.00
13	6030515	BITUMINOUS TACK COAT, SPECIFIED EMULSIFIED ASPHALT	7,000	Gal	\$2.50	\$17,500.00
14	6050530	JOINT SEALING FILLER, TYPE III, HOT POURED	2,000	Lft	\$5.00	\$10,000.00
15	6200515	AIRPORT PAVEMENT MARKING, SOLID	77,000	Sft	\$0.50	\$38,500.00
16	6200519	AIRPORT PAVEMENT MARKING, 1/2 RATE, SOLID	77,000	Sft	\$0.50	\$38,500.00
17	7017051	MISC. DRAINAGE	1	LS	\$175,000.00	\$175,000.00
18	7050511	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	11,200	Lft	\$8.00	\$89,600.00
19	7050525	UNDERDRAIN CLEANOUT, AS SPECIFIED	32	Each	\$600.00	\$19,200.00
20	8007010	MISC. STABILIZATION FABRIC	648,000	Sft	\$0.20	\$129,600.00
21	9010450	SEEDING WITH MIXTURE AND RATE, AS SPECIFIED	12	Acre	\$1,500.00	\$18,000.00
22	9050520	TOPSOILING FROM OFF-SITE, MATERIAL FURNISHED BY CONTRACTOR	3,700	Cyd	\$25.00	\$92,500.00
TOTAL CONSTRUCTION COST						\$3,514,300.00
ENGINEERING & ADMINISTRATION (20%+/-)						\$773,000.00
CONTINGENCY (10%+/-)						\$351,000.00
TOTAL PROJECT COST						\$4,638,300.00

ASSUMPTIONS:

Assume 14" concrete and 4" of asphalt to be removed . Assume replace 100' wide runway with 75' wide runway. Assume runway pavement section is same as proposed section for Runway 17-35 - 3" asphalt, 4" P-209, 20" P-154 per APtech report (assume P-154 is reduced to 14" and a 6" drainage layer is included per Somat geotechnical report). Assume remove shoulder pavement and replace with turf. Assume shoulder pavement section is 3" asphalt and 4" P-209. Assume existing concrete and asphalt will be removed and brought off site. Assume existing bituminous and concrete pavement on east shoulder (50' width) will be removed. Assume length is 4,846.

CONCEPT (PROJECT) NARRATIVE AND JUSTIFICATION SHEET FOR AIRPORT CAPITAL IMPROVEMENT PROGRAM (ACIP)

Airport and Associated City Grosse Ile Municipal Airport Grosse Ile, MI		Concept(s) Development Year 2015	
Concept(s) Description Taxiway A East Reconstruction - Design			
Concept(s) Narrative/Justification (see guidance on preparing your project's justification) Taxiway A pavement continues to deteriorate in the same way as Runway 17-35. The PCI of 73 does not accurately reflect the pavement failures that are occurring. The original concrete taxiway was constructed in 1950. An asphalt overlay was placed in 1984. A concrete overlay was placed in 1997. No other major maintenance or rehabilitations have taken place since 1997.			
PCI Information for pavement rehabilitation (Please provide PCI rating(s) and year surveyed for proposed project)			
Section TWAGI-10	Date of PCI Survey 2011	PCI Rating 73	
Section	Date of PCI Survey	PCI Rating	
Section	Date of PCI Survey	PCI Rating	
ALP Verification (Please provide date of approved ALP and applicable sheet number(s) where proposed project is located)			
Verify Project is on ALP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		Date of Original FAA Approved ALP 3-21-1997	Sheet Number(s) 4, 6
Date(s) of Approved Update(s)			
Comments			

ALP Note: If not on Airport Layout Plan (ALP), project cannot be programmed until the proposed development, if applicable is on an approved ALP.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
TAXIWAY A EAST (TAXIWAY C TO RUNWAY 4-22) - ASPHALT RECONSTRUCTION
BASED ON FY 2013 DOLLARS

E39.MKT.CRM

12/06/13

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000410	SAFETY AND SECURITY	1	LS	\$25,000.00	\$25,000.00
2	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$40,000.00	\$40,000.00
3	1257001	MISC. ELECTRICAL	1	LS	\$204,000.00	\$204,000.00
4	1527011	MISC. REMOVE EXISTING PCC PAVEMENT, VARIABLE THICKNESS	13,000	Syd	\$8.00	\$104,000.00
5	1540511	SUBBASE COURSE, TYPE 2 (SAND), COMPACTED MEASURE	5,100	Cyd	\$15.00	\$76,500.00
6	1547021	MISC. MDOT 6AA AGGREGATE DRAINAGE COURSE	2,200	Cyd	\$35.00	\$77,000.00
7	2090520	CRUSHED AGGREGATE BASE COURSE, MATERIAL AS SPECIFIED, COMPACTED IN PLACE	1,500	Cyd	\$32.00	\$48,000.00
8	4110620	BITUMINOUS AGGREGATE SURFACE COURSE, 20AAX COMPOSITION	2,650	Ton	\$90.00	\$238,500.00
9	6030515	BITUMINOUS TACK COAT, SPECIFIED EMULSIFIED ASPHALT	1,980	Gal	\$2.50	\$4,950.00
10	6050530	JOINT SEALING FILLER, TYPE III, HOT POURED	900	Lft	\$5.00	\$4,500.00
11	6200515	AIRPORT PAVEMENT MARKING, SOLID	5,000	Sft	\$1.00	\$5,000.00
12	7017051	MISC. DRAINAGE	1	LS	\$30,000.00	\$30,000.00
13	7050511	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	5,200	Lft	\$8.00	\$41,600.00
14	7050525	UNDERDRAIN CLEANOUT, AS SPECIFIED	12	Each	\$600.00	\$7,200.00
15	8007010	MISC. STABILIZATION FABRIC	117,000	Sft	\$0.12	\$14,040.00
16	9017001	MISC. RESTORATION	1	LS	\$12,000.00	\$12,000.00
TOTAL CONSTRUCTION COST						\$932,290.00
CONTINGENCY (15%+/-)						\$140,000.00
ENGINEERING & ADMINISTRATION (20%+/-)						\$214,000.00
TOTAL PROJECT COST						\$1,286,290.00

ASSUMPTIONS:

Assume 17" concrete to be removed. Assume pavement section is same as proposed section for Runway 17-35 - 3" asphalt, 4" P-209, 20" P-154 per APTech report (assume P-154 is reduced to 14" and a 6" drainage layer is included per Somat geotechnical report).

CONCEPT (PROJECT) NARRATIVE AND JUSTIFICATION SHEET FOR AIRPORT CAPITAL IMPROVEMENT PROGRAM (ACIP)

Airport and Associated City Grosse Ile Municipal Airport Grosse Ile, MI		Concept(s) Development Year 2015	
Concept(s) Description Pavement Repairs			
Concept(s) Narrative/Justification (see guidance on preparing your project's justification) The runway and taxiway pavements continue to deteriorate. The PCI ratings do not accurately reflect the pavement failures that are occurring. Pavement repairs will likely be required until reconstruction can take place.			
PCI Information for pavement rehabilitation (Please provide PCI rating(s) and year surveyed for proposed project)			
Section TWAGI-10	Date of PCI Survey 2011	PCI Rating 73	
Section RW422GI-10	Date of PCI Survey 2011	PCI Rating 97	
Section RW1735GI-10 and -20	Date of PCI Survey 2011	PCI Rating 78 and 74	
ALP Verification (Please provide date of approved ALP and applicable sheet number(s) where proposed project is located)			
Verify Project is on ALP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		Date of Original FAA Approved ALP 3-21-1997	Sheet Number(s)
Date(s) of Approved Update(s)			
Comments			

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CONCEPT (PROJECT) NARRATIVE AND JUSTIFICATION SHEET FOR AIRPORT CAPITAL IMPROVEMENT PROGRAM (ACIP)

Airport and Associated City Grosse Ile Municipal Airport Grosse Ile, MI		Concept(s) Development Year 2016	
Concept(s) Description Runway 4-22 Reconstruction - Construction			
Concept(s) Narrative/Justification (see guidance on preparing your project's justification) Runway 4-22 is now starting to deteriorate in the same way as Runway 17-35. It is believed that the same underlying issues and material issues exist in Runway 4-22 as in Runway 17-35. The PCI of 97 does not accurately reflect the pavement failures that are occurring. Assumed asphalt reconstruction for the construction cost estimate.			
PCI Information for pavement rehabilitation (Please provide PCI rating(s) and year surveyed for proposed project)			
Section RW422GI-10	Date of PCI Survey 2011	PCI Rating 97	
Section	Date of PCI Survey	PCI Rating	
Section	Date of PCI Survey	PCI Rating	
ALP Verification (Please provide date of approved ALP and applicable sheet number(s) where proposed project is located)			
Verify Project is on ALP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		Date of Original FAA Approved ALP 3-21-1997	Sheet Number(s) 4
Date(s) of Approved Update(s)			
Comments			

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PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
RUNWAY 4-22: FULL DEPTH RECONSTRUCTION WITH ASPHALT
BASED ON FY 2013 DOLLARS

E39.MKT.CRM

12/05/13

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000410	SAFETY AND SECURITY	1	LS	\$25,000.00	\$25,000.00
2	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$135,000.00	\$135,000.00
3	1000535	PERMITS	1	LS	\$5,000.00	\$5,000.00
4	1257051	MISC. ELECTRICAL	1	LS	\$180,000.00	\$180,000.00
5	1520410	UNCLASSIFIED EXCAVATION	21,000	Cyd	\$7.00	\$147,000.00
6	1520470	REMOVAL AND DISPOSAL OF BITUMINOUS PAVEMENT	37,500	Syd	\$4.00	\$150,000.00
7	1520472	REMOVAL AND DISPOSAL OF CONCRETE PAVEMENT	89,300	Syd	\$8.00	\$714,400.00
8	1540511	SUBBASE COURSE, TYPE 2 (SAND), COMPACTED MEASURE	16,500	Cyd	\$15.00	\$247,500.00
9	1547021	MISC. MDOT 6AA AGGREGATE DRAINAGE COURSE	7,100	Cyd	\$35.00	\$248,500.00
10	2080610	SOIL EROSION AND SEDIMENTATION CONTROL	1	LS	\$18,000.00	\$18,000.00
11	2090520	CRUSHED AGGREGATE BASE COURSE, MATERIAL AS SPECIFIED, COMPACTED IN PLACE	5,100	Cyd	\$35.00	\$178,500.00
12	4110620	BITUMINOUS AGGREGATE SURFACE COURSE, 20AAX COMPOSITION	9,300	Ton	\$90.00	\$837,000.00
13	6030515	BITUMINOUS TACK COAT, SPECIFIED EMULSIFIED ASPHALT	7,000	Gal	\$2.50	\$17,500.00
14	6050530	JOINT SEALING FILLER, TYPE III, HOT POURED	2,000	Lft	\$5.00	\$10,000.00
15	6200515	AIRPORT PAVEMENT MARKING, SOLID	77,000	Sft	\$0.50	\$38,500.00
16	6200519	AIRPORT PAVEMENT MARKING, 1/2 RATE, SOLID	77,000	Sft	\$0.50	\$38,500.00
17	7017051	MISC. DRAINAGE	1	LS	\$175,000.00	\$175,000.00
18	7050511	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	11,200	Lft	\$8.00	\$89,600.00
19	7050525	UNDERDRAIN CLEANOUT, AS SPECIFIED	32	Each	\$600.00	\$19,200.00
20	8007010	MISC. STABILIZATION FABRIC	648,000	Sft	\$0.20	\$129,600.00
21	9010450	SEEDING WITH MIXTURE AND RATE, AS SPECIFIED	12	Acre	\$1,500.00	\$18,000.00
22	9050520	TOPSOILING FROM OFF-SITE, MATERIAL FURNISHED BY CONTRACTOR	3,700	Cyd	\$25.00	\$92,500.00
TOTAL CONSTRUCTION COST						\$3,514,300.00
ENGINEERING & ADMINISTRATION (20%+/-)						\$773,000.00
CONTINGENCY (10%+/-)						\$351,000.00
TOTAL PROJECT COST						\$4,638,300.00

ASSUMPTIONS:

Assume 14" concrete and 4" of asphalt to be removed . Assume replace 100' wide runway with 75' wide runway. Assume runway pavement section is same as proposed section for Runway 17-35 - 3" asphalt, 4" P-209, 20" P-154 per APtech report (assume P-154 is reduced to 14" and a 6" drainage layer is included per Somat geotechnical report). Assume remove shoulder pavement and replace with turf. Assume shoulder pavement section is 3" asphalt and 4" P-209. Assume existing concrete and asphalt will be removed and brought off site. Assume existing bituminous and concrete pavement on east shoulder (50' width) will be removed. Assume length is 4,846.

CONCEPT (PROJECT) NARRATIVE AND JUSTIFICATION SHEET FOR AIRPORT CAPITAL IMPROVEMENT PROGRAM (ACIP)

Airport and Associated City Grosse Ile Municipal Airport Grosse Ile, MI		Concept(s) Development Year 2016	
Concept(s) Description Taxiway A East Reconstruction - Construction			
Concept(s) Narrative/Justification (see guidance on preparing your project's justification) Taxiway A pavement continues to deteriorate in the same way as Runway 17-35. The PCI of 73 does not accurately reflect the pavement failures that are occurring. The original concrete taxiway was constructed in 1950. An asphalt overlay was placed in 1984. A concrete overlay was placed in 1997. No other major maintenance or rehabilitations have taken place since 1997.			
PCI Information for pavement rehabilitation (Please provide PCI rating(s) and year surveyed for proposed project)			
Section TWAGI-10	Date of PCI Survey 2011	PCI Rating 73	
Section	Date of PCI Survey	PCI Rating	
Section	Date of PCI Survey	PCI Rating	
ALP Verification (Please provide date of approved ALP and applicable sheet number(s) where proposed project is located)			
Verify Project is on ALP <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A		Date of Original FAA Approved ALP 3-21-1997	Sheet Number(s) 4, 6
Date(s) of Approved Update(s)			
Comments			

ALP Note: If not on Airport Layout Plan (ALP), project cannot be programmed until the proposed development, if applicable is on an approved ALP.



PROBABLE PROJECT COST

GROSSE ILE MUNICIPAL AIRPORT
GROSSE ILE, MI
TAXIWAY A EAST (TAXIWAY C TO RUNWAY 4-22) - ASPHALT RECONSTRUCTION
BASED ON FY 2013 DOLLARS

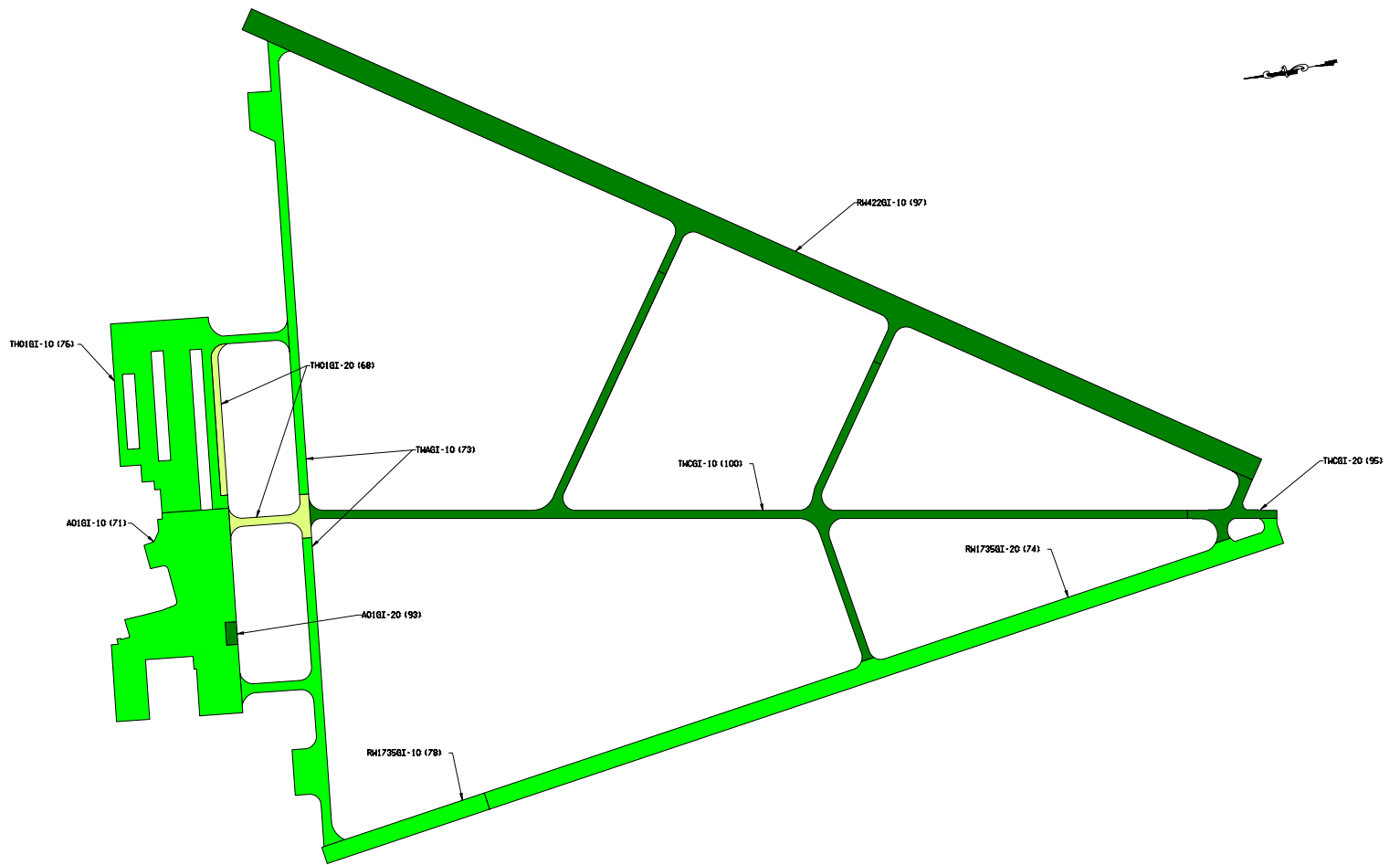
E39.MKT.CRM

12/06/13

ITEM NO	MDOT SPEC	DESCRIPTION	QUANTITY	UNITS	UNIT PRICE	TOTAL
1	1000410	SAFETY AND SECURITY	1	LS	\$25,000.00	\$25,000.00
2	1000400	MOBILIZATION AND GENERAL CONDITIONS	1	LS	\$40,000.00	\$40,000.00
3	1257001	MISC. ELECTRICAL	1	LS	\$204,000.00	\$204,000.00
4	1527011	MISC. REMOVE EXISTING PCC PAVEMENT, VARIABLE THICKNESS	13,000	Syd	\$8.00	\$104,000.00
5	1540511	SUBBASE COURSE, TYPE 2 (SAND), COMPACTED MEASURE	5,100	Cyd	\$15.00	\$76,500.00
6	1547021	MISC. MDOT 6AA AGGREGATE DRAINAGE COURSE	2,200	Cyd	\$35.00	\$77,000.00
7	2090520	CRUSHED AGGREGATE BASE COURSE, MATERIAL AS SPECIFIED, COMPACTED IN PLACE	1,500	Cyd	\$32.00	\$48,000.00
8	4110620	BITUMINOUS AGGREGATE SURFACE COURSE, 20AAX COMPOSITION	2,650	Ton	\$90.00	\$238,500.00
9	6030515	BITUMINOUS TACK COAT, SPECIFIED EMULSIFIED ASPHALT	1,980	Gal	\$2.50	\$4,950.00
10	6050530	JOINT SEALING FILLER, TYPE III, HOT POURED	900	Lft	\$5.00	\$4,500.00
11	6200515	AIRPORT PAVEMENT MARKING, SOLID	5,000	Sft	\$1.00	\$5,000.00
12	7017051	MISC. DRAINAGE	1	LS	\$30,000.00	\$30,000.00
13	7050511	PIPE UNDERDRAIN 6", TYPE AS SPECIFIED	5,200	Lft	\$8.00	\$41,600.00
14	7050525	UNDERDRAIN CLEANOUT, AS SPECIFIED	12	Each	\$600.00	\$7,200.00
15	8007010	MISC. STABILIZATION FABRIC	117,000	Sft	\$0.12	\$14,040.00
16	9017001	MISC. RESTORATION	1	LS	\$12,000.00	\$12,000.00
TOTAL CONSTRUCTION COST						\$932,290.00
CONTINGENCY (15%+/-)						\$140,000.00
ENGINEERING & ADMINISTRATION (20%+/-)						\$214,000.00
TOTAL PROJECT COST						\$1,286,290.00

ASSUMPTIONS:

Assume 17" concrete to be removed. Assume pavement section is same as proposed section for Runway 17-35 - 3" asphalt, 4" P-209, 20" P-154 per APtech report (assume P-154 is reduced to 14" and a 6" drainage layer is included per Somat geotechnical report).



86-100

71-85

56-70

41-55

26-40

11-25

0-10

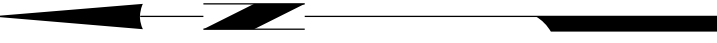
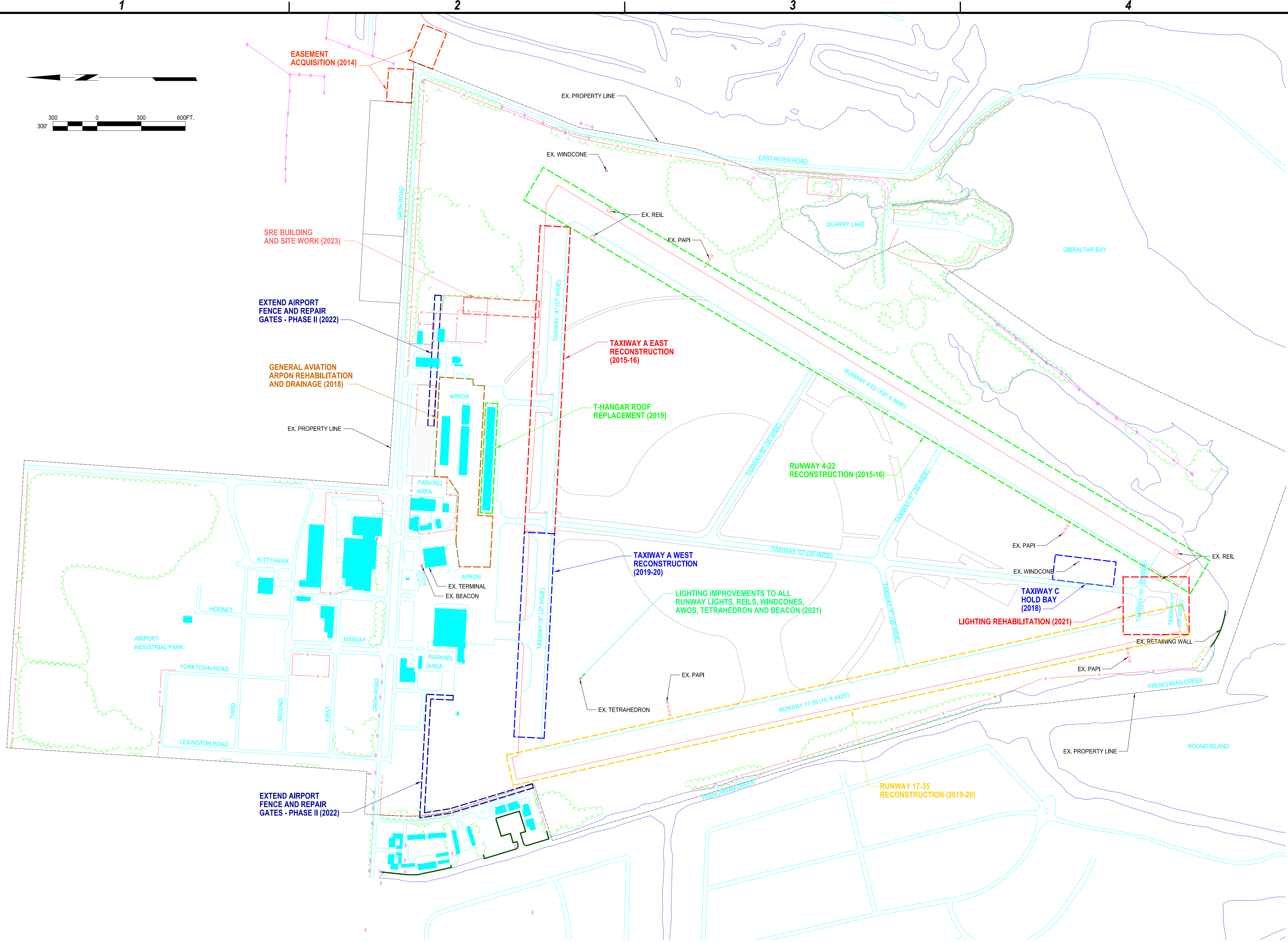
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PROJECT NO:	DESIGNED BY:	DRAWN BY:	CHECKED BY:	DATE
ES9-MKT-CRM	KUJ	SJMCEJ	KUJ	
DATE:	AS SHOWN	ACIP PLAN SHEET		
SCALE:				
CADD FILE NO:				

GROSSE ILE MUNICIPAL AIRPORT
TOWNSHIP OF GROSSE ILE
GROSSE ILE, MI

GROSSE ILE
MUNICIPAL AIRPORT
ACIP

SHEET REFERENCE NO.
1
SHEET 1 OF 1

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